

Apple-Works Forum

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Support for AppleWorks and ///EZ Pieces Users

NAUG's Macintosh "Sister"

In early 1991, NAUG received a call from Claris Corporation inviting us to see a new product. We accepted the invitation and got our first look at ClarisWorks running on a Macintosh computer. We were impressed. Here was an exciting product that promised easy-to-use, powerful, and truly integrated word processor, spreadsheet, and graphic environments.

Claris encouraged us to form a user group for ClarisWorks. We accepted the challenge and started C•WUG (pronounced SEE-wug), the ClarisWorks Users Group International.

It should be no surprise to long-standing NAUG members that C•WUG publishes a monthly newsletter (the *ClarisWorks Journal*), offers access to a Macintosh-based public domain library, and offers a ClarisWorks bulletin board service. (In fact, C•WUG covered the costs necessary to expand NAUG's bulletin board so it could accommodate both organizations. By putting both organizations on the same system, NAUG and C•WUG members can access the libraries developed by both groups.)

We believe that NAUG and C•WUG will complement each other. For example, we now represent more computer users; that gives NAUG greater negotiating power with manufacturers and vendors. It also gives NAUG members access to C•WUG's cross-platform products (such as file translators) and Macintosh system software. NAUG members can also take advantage of C•WUG special offers and order disks from C•WUG's Public Domain Library. More subtly, we also gain the expertise necessary to teach members of both organizations how to integrate the two environments.

The **National AppleWorks Users Group (NAUG)** is an association that supports AppleWorks users. NAUG provides technical support and information about AppleWorks and enhancements to that program. Our primary means of communicating with members is through the monthly newsletter entitled the **AppleWorks Forum**.

We want to assure our NAUG colleagues that although no NAUG resources were used to found C•WUG, NAUG members will benefit from the new organization. (If you use NAUG's bulletin board service, you have already seen some of the advances we are bringing on-line with the new organization. This includes 14.4K bps access to the Electronic Forum through our new v32.bis-compliant 9600 baud modems.)

NAUG is in its sixth year of support for the AppleWorks community. We want to assure you of our commitment to AppleWorks and to the world of Apple II computing. And we trust that you will welcome our sister organization into the fold. We will make certain that the two organizations remain independent yet complement each other for the betterment of us all.

[A one-year C•WUG membership usually costs \$34. NAUG members can join C•WUG and receive one year (10 issues) of the ClarisWorks Journal for \$29. C•WUG accepts Visa and MasterCard. Include your NAUG membership number, name, address, telephone number, and a check or credit card information with your C•WUG membership application. Mail to: C•WUG, Box 701010, Plymouth, Michigan 48170; (313) 454-1969; Fax: (313) 454-1965.]

AppleWorks Forum

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Member Helps with Print Buffers

Dear Cathleen,

Printing long AppleWorks documents can be tedious because you cannot use your computer while you print. Print buffers eliminate this problem by storing the data you send to the printer; that lets you use AppleWorks while the computer and buffer work together to print the document.

Print buffers come in both external and internal models. External buffers are more expensive than internal models, but include a "clear" or "reset" switch that lets you cancel your output. Internal buffers, which are available as add-on options for many printer interface cards, don't offer a "clear" switch. Once the document is in the buffer and printing, you cannot cancel the printout.

I developed a way to modify buffered printer cards so you can clear the cards without rebooting. These modifications void any warranties on the cards, but I will gladly send my fellow NAUG members generic instructions that describe how to perform the changes. Just send me a self-addressed, stamped business-size envelope with your request.

The modifications require good soldering skills, so I will also include the cost if they want me to do the modification (no more than \$25).

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[Ed: Note that print buffers work well with AppleWorks but do not speed up SuperFonts, AppleWorks GS, Print Shop, and other graphic programs.]

AppleWorks 3.0 on 5.25-inch Disks

Dear NAUG,

I recently configured some 5.25-inch disk versions of AppleWorks 3.0 for my school by following the directions in the October 1989 issue of the *AppleWorks Forum*. The computer loads the word processor side of the disk and then locks up with the

"Insert the DB PROGRAM disk in a drive and press Return" message on the screen.

I checked the disks and they contain the correct files. What is going wrong?

John Nesladek
Fredonia, Wisconsin

[Ed: All AppleWorks program and dictionary disks must have the same volume name. You probably gave the disks different names when you formatted them. Try using TimeOut FileMaster or Copy II+ to rename the volumes to /APPLEWORKS and see if that solves the problem.]

If you haven't already done so, correct Figure 2 on page 5 of the October 1989 issue by adding "SEGER" to the list of files you must include on side one of the disk.]

Other Uses for Talking AppleWorks

Dear Cathleen,

I enjoyed Gary Griffith's description of RC Systems' speech systems for AppleWorks *[Ed: See "AppleWorks for the Visually Impaired" in last month's issue of the AppleWorks Forum.]*

By using headphones in conjunction with RC Systems' DoubleTalk card or with the Echo speech card, you can get the computer to "read" to any student. Since the DoubleTalk card will read AppleWorks word processor files, the computer can read anything you can store on your disk in text (ASCII) files, including text materials scanned with InWords and the Quickie hand scanner. This can include spelling lists, vocabulary lists, stories, tests, and the like. The Echo card works in a similar way with many primary grade programs (particularly the Talking Schoolhouse series).

Using the computer to provide this service for the one or two students who need the help frees up the teacher to work with other students.

Jack Countryman
Greensburg, Indiana

SuperWorks: AppleWorks for Your MS-DOS Computer

by Robert Netro, Warren Williams, and William Davis

Most AppleWorks users offer two reasons for keeping their Apple II computers. First, their Apple II does everything they want it to do. They ask, "Why buy another computer and new software if I can do everything I want with my Apple II?"

Second, AppleWorks is so easy to use, fast, convenient, and flexible that users do not want to endure the difficulties associated with configuring and learning new programs.

But some AppleWorks users also work in other computer environments. Usually, this results from decisions made at their office or place of work. At other times, it is the need to run a specific application that is not available for their venerable Apple II system. And some users need a reasonably priced portable MS-DOS system they can take on the road.

These users should consider SuperWorks, an AppleWorks 2.0 work-alike that runs on all MS-DOS computers. SuperWorks is an easy-to-use, fast, machine language program that is particularly well suited for laptop and notebook computers.

AppleWorks users who learn to use the Alt Key instead of Open-Apple know most of what they need to know to use SuperWorks.

Figure 1: SuperWorks' Main Menu

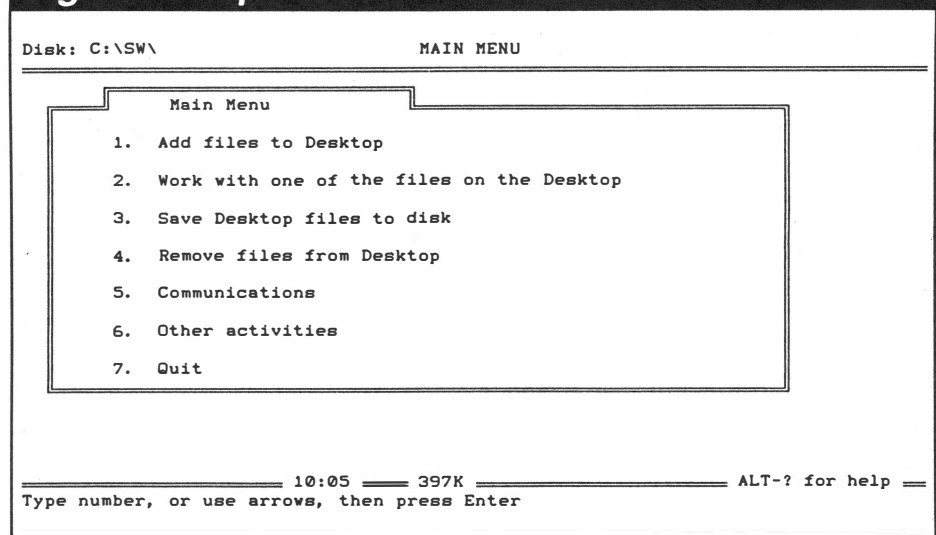
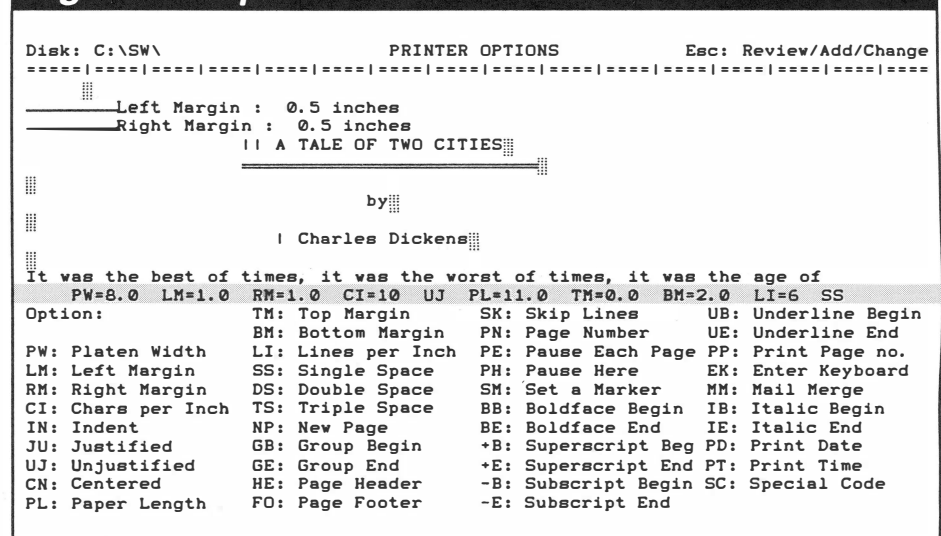


Figure 2: SuperWorks' Word Processor



The SuperWorks Modules

SuperWorks' word processor, data base, and spreadsheet modules are excellent replicas of the corresponding modules in AppleWorks. The SuperWorks modules are fast, run reliably, and, with

Figure 3: SuperWorks' Data Base

Disk: C:\SW\	REVIEW/ADD/CHANGE				Esc: Main Menu	
Selection: All records						
Name	Population	Area	Capital	Jan	Jul	Admitted
Alabama	3,990,000	51,609	Montgomery	48	82	1819
Alaska	500,000	586,412	Juneau	24	56	1959
Arizona	3,053,000	113,909	Phoenix	52	92	1912
Arkansas	2,349,000	53,104	Little Rock	40	82	1836
California	25,622,000	158,693	Sacramento	48	63	1850
Colorado	3,178,000	104,247	Denver	30	73	1876
Connecticut	3,154,000	5,009	Hartford	25	72	1788
Delaware	613,000	2,057	Dover	32	76	1787
Dist. of Col.	623,000	67	-	36	79	1791
Florida	10,976,000	58,560	Tallahassee	55	81	1845
Georgia	5,837,000	58,876	Atlanta	42	78	1788
Hawaii	1,039,000	6,450	Honolulu	72	80	1959
Idaho	1,001,000	83,557	Boise	29	75	1890
Illinois	11,511,000	56,400	Springfield	25	75	1818
Indiana	5,498,000	36,291	Indianapolis	28	75	1816
Iowa	2,910,000	56,290	Des Moines	20	75	1846
Kansas	2,438,000	82,264	Topeka	31	81	1861
File: STATES 10 10 393K				ALT-? for help		
Type entry or use ALT commands						

minor exceptions, use the same commands found in AppleWorks. You can see the similarities between SuperWorks and AppleWorks in the SuperWorks screens depicted in *Figures 1* through *4*. However, SuperWorks and AppleWorks are not identical. Here are some of the differences we found between the two programs:

Word Processor

SuperWorks does not offer a spell checker, multiple-line headers and footers, or the more sophisticated tab features found in AppleWorks 3.0.

SuperWorks supports all the formatting and justification commands offered by AppleWorks, but only from the Options Menu and not with the Control-N, Control-R, Control-C, Control-J, and Control-P keystrokes accepted by AppleWorks 3.0.

SuperWorks and AppleWorks take different approaches to text wrap on the screen. AppleWorks allows up to 77 characters on each line. If you set the printer options to print on wide paper or to print small characters, AppleWorks displays the first 77 characters, then wraps the text on the screen and displays the next word on the following line. That lets you read your text but makes it difficult to print heavily formatted, wide documents.

SuperWorks does not "split" the text. Instead SuperWorks scrolls the screen to the left and right so each line of the screen displays what the program will print on that line. That lets you format wide documents but makes it difficult to read and

edit text as it scrolls left and right on the screen. One of the authors (who regularly prints more than 77 characters on a line) creates and edits his SuperWorks documents at 10 characters per inch with standard margin settings. Then he changes the settings and checks the format of the document before printing. Any significant editing involves re-inserting the 10 cpi and standard margin formatting commands, making the edits, and re-inserting those commands.

Although we miss the spell checker and other features available in later

versions of AppleWorks, SuperWorks' word processor offers some useful functions available only as add-ons to AppleWorks. For example, Alt-K calculates the number of pages, words, characters, paragraphs, and lines in a document. SuperWorks displays boldface, underline, superscript, and subscript characters in different hues on color monitors. And SuperWorks limits document size only by the size of your SuperWorks desktop.

Data Base

SuperWorks overcomes many of the limitations in AppleWorks' data base module. Specifically, SuperWorks allows up to 250 categories in each data base record and more than 75 reports for each file.

SuperWorks also lets you add and delete categories without destroying your custom layouts and reports. Finally, although SuperWorks does not offer the inverse category names available in AppleWorks 3.0, the program lets you use graphic characters to draw frames and images that can enhance your single record layout screens.

Collectively, these changes give SuperWorks an easy-to-use, functional, albeit still non-relational, data base system.

Spreadsheet

SuperWorks' spreadsheet module is more powerful than the corresponding module in AppleWorks. SuperWorks spreadsheets can include up to 126 columns and 6000 rows. The program offers 82

Figure 4: Linked Spreadsheets

Figure 4A: Currency Conversion Template

Disk: C:\SW REVIEW/ADD/CHANGE Esc: Main Menu

1	A	B	C	D	E	F	G	H
2				CURRENT	EXCHANGE RATE TO THE US DOLLAR			
3				=====				
4								
5								
6								
7	GERMANY			1.56				
8								
9	JAPAN			120				
10								
11	UNITED KINGDOM			0.8				
12								
13	FRANCE			4.2				
14								
15	SWITZERLAND			1.34				
16								
17								
18								
19								

File: RATES 11:00 381K ALT-? for help

D9: (Value) 120

Type entry or use ALT commands

Figure 4B: Inventory Template

Disk: C:\SW REVIEW/ADD/CHANGE Esc: Main Menu

1	A	B	C	D	E	F	G	H
2				Yen Rate -	120			
3								
4								
5								
6								
7								
8	Dis.	Quant.	Yen Unit Price	\$ Unit Price	Total \$ Price			
9	Hard Disk	64	51,800	\$431.67	\$27,626.67			
10	Back-Up Tape	12	81,400	\$678.33	\$8,140.00			
11	Floppy Disk	280	10,360	\$86.33	\$24,173.33			
12	RS-232 Card	40	4,000	\$33.33	\$1,333.33			
13	Game Cont.	70	2,800	\$23.33	\$1,633.33			
14	Power Supply	120	8,880	\$74.00	\$8,880.00			
15	Keyboard	130	8,880	\$74.00	\$9,620.00			
16	12" Monitor	125	150,000	\$1,250.00	\$156,250.00			
17	Joystick	110	3,700	\$30.83	\$3,391.67			
18								
19								

File: PR-STOCK 11 06 381K ALT-? for help

C2: (Value, Layout-,0) +"RATES":D9

Type entry or use ALT commands

in cell D9 in the RATES worksheet.) Changing the RATES template automatically updates the inventory worksheet and all other linked templates in one operation.

Communications

Although AppleWorks does not support telecommunications, SuperWorks' communications module is rudimentary, at best. Unfortunately, the documentation does little to help you get started and use this module.

Installing your communications setup requires a lot of trial and error because of the inadequate documentation. You do all your work in terminal mode and must enter the appropriate "AT" commands to communicate with your modem.

Beginners should avoid using SuperWorks for communications; the program assumes that you know a lot about the black art of sending signals across telephone lines. Advanced users will be dissatisfied by the lack of features and unreliable performance of this module. For example, SuperWorks lacks automatic logon, scripting, and other features

found in most telecommunications programs. And, although SuperWorks supports the Xmodem protocol, file transfers were problematic.

Macros

SuperWorks offers two types of macros; "on-the-fly" (OTF) macros and "key assigned" macros. However, all macros consist of captured keystrokes; the two types of macros are not as different as they first appear. (The OTF macro is really a temporary macro. When you quit SuperWorks, the program asks if you want to assign the current OTF macro to a permanent keystroke.)

arithmetic, date, string, and logic functions compared to 43 function supported by AppleWorks 3.0. SuperWorks includes powerful date, time, and text manipulation functions that are important in business applications and are not available in AppleWorks.

Although not well documented in the manual, SuperWorks can link two or more spreadsheets. For example, Figure 4A depicts a template with different currency conversion rates. The worksheet in Figure 4B is an inventory template that accepts values in dollars and then uses the spreadsheet in Figure 4A to convert the values into yen. (The formula +"RATES":D9 in Figure 4B captures the data

Software Review...

SuperWorks can write your macros into a word processor file; that is the only way to integrate non-keyboard commands in the macros.

You can designate any macro as a boot macro. For example, one author created a macro that loaded four files each time he launched SuperWorks.

Although macros can call other macros, SuperWorks' macro commands lack the richness and flexibility of the command structure offered by UltraMacros. For example, SuperWorks does not let you capture user input in the middle of a macro or branch between operations based on the contents of a cell or data base category.

Overall, we consider SuperWorks' macro capability a welcome addition to the program, but we expect it will be frustrating for UltraMacros users who write branching macros for AppleWorks.

General Operation

SuperWorks offers some other nice surprises. For example, SuperWorks lets you load as many files on the desktop as system memory permits. We successfully loaded more than 100 small files onto a 397K desktop. Scrolling through the long list of files was easy and impressive.

SuperWorks also remembers all your previously used pathnames and displays the pathnames on the Add Files Menu. The list of available directories seems unlimited, which makes it easy to change pathnames.

Importing Files

SuperWorks can import, but not export, AppleWorks, Lotus, and dBase files. However, you must first transfer your AppleWorks files onto an MS-DOS disk. Once transferred, the imported files look as if they were created with SuperWorks.

SuperWorks has no problem importing complex AppleWorks spreadsheet and data base files; it even imports the screen and report formats. The program imports AppleWorks 1.x and 2.x word processor files without problems, but it cannot import AppleWorks 3.0 files that contain decimal, center, or right tabs, or multi-line headers or footers. You will have to delete those commands from your AppleWorks files before you import the data into SuperWorks.

SuperWorks' ability to import Lotus, dBase, and ASCII files opens up the program to files created with any program that can write files in these formats. For example, there is no direct translator that lets you import Microsoft Works spreadsheet files into SuperWorks. However, Works spreadsheet files are Lotus-compatible and can be read into SuperWorks.

Files generally take less space in SuperWorks than in the original application. For example, a 41K Lotus-format file created with Microsoft Works took only 14K when imported into SuperWorks.

Unfortunately, SuperWorks' can only export ASCII files. Thus, you cannot easily bring AppleWorks files home from school, enhance them with SuperWorks, and then bring your enhanced files back to work. This is a significant limitation that reduces the program's connectivity to other products.

Finally, you will have to edit many of your imported Lotus and dBase files. SuperWorks does not offer all the features of these dedicated spreadsheet and data base programs; you should check your SuperWorks files carefully to make certain these files imported correctly.

Bugs, Problems, and Limitations

SuperWorks can only use the first 640K of memory in your computer. Thus, the largest SuperWorks desktop available was 399K when we worked on a 2-megabyte 386-SX system running MS-DOS 5.0 with the drivers loaded into high memory. Other systems generated SuperWorks desktops between 275K and 387K. This will be adequate for most users, but AppleWorks power-users will not be able to use their largest files with SuperWorks.

On the other hand, SuperWorks is remarkably stable for such a new and complex program. One reviewer occasionally experienced a problem displaying the Add Files Menu. The other reviewers could not replicate this problem, so it could be the result of a conflict with a Terminate and Stay Ready (TSR) program or a DOS shell.

The other reviewers encountered no bugs or problems other than those already described for the communications module.

Software Review...

As an AppleWorks work-alike, SuperWorks offers both the advantages and shortcomings of AppleWorks. Consequently, SuperWorks does not offer features one comes to expect in the MS-DOS environment. For example, most MS-DOS data base programs (including the data base modules in such integrated programs as Microsoft Works and Works for Windows) include a comprehensive set of arithmetic and logic functions that parallel the functions available in spreadsheet programs. SuperWorks' data base module offers only the functions found in the AppleWorks data base.

Finally, unlike most other MS-DOS programs, SuperWorks does not let you exit to DOS without quitting the application. (Fortunately, MS-DOS 5.0 offers a work-around for this problem.)

Hardware Requirements

SuperWorks runs on any MS-DOS system with at least 512K of RAM and at least one 360K disk drive. As indicated earlier, SuperWorks only recognizes the first 640K installed in your system.

SuperWorks proved stable on all our computers, including IBM XT and AT clones running at 8 and 16 megahertz respectively, an 80286-equipped laptop running at 12 megahertz, a NEC V-20-equipped laptop running at 9 megahertz, and an 80486 system running at 33 megahertz. SuperWorks was reasonably fast on even the slowest of our computers.

The program proved compatible with a Microsoft Mouse. The mouse movements mimic the Arrow Keys. The left button on the mouse replicates the Return Key, the right button enters an Escape, and both buttons (or the middle button on three-button mice) duplicates the function of the Alt-Q key combination and displays the Desktop Index.

SuperWorks supports both CGA and VGA color; it is a pleasure to view the different elements on the screen in distinct colors. Although the default color combinations are most unpleasant (no, we don't like lavender backgrounds in our spreadsheets), you can easily change the defaults to more attractive combinations.

The program's speed and small size lets you run SuperWorks from floppy disks; that makes it suit-

able for even the least expensive laptop and notebook computers. Owners of more sophisticated systems can load SuperWorks into memory and then turn off their hard drive. That dramatically extends battery life and more than doubles the length of time you can use most portable systems without recharging the batteries.

Printer Support

SuperWorks supports most popular dot matrix printers and includes drivers for Brother, Citizen, Epson, Fujitsu, Facit, Honeywell, IBM, Mannesmann, Okidata, Olivetti, Olympia, Panasonic, Seikosha, Sharp, and Star printers.

In most cases these drivers are more powerful than those available for AppleWorks. For example, most of the drivers let you use the different character sets built into the various printers.

SuperWorks also includes drivers for Brother, Canon, Kyocera, and HP LaserJet laser printers. Finally, the program offers a custom printer option that lets you create your own driver.

Unlike AppleWorks, which limits you to three printers, SuperWorks supports a virtually unlimited number of printers on the Printer Menu. (One reviewer was able to load more than 100 printer drivers into SuperWorks.) The drivers stay memory resident, and each driver takes about 1K from your desktop memory.

Protection

Unfortunately, SuperWorks is a "protected" program. You can make an unlimited number of backup copies of the SuperWorks disks, but you need a special plug in the parallel port of your computer for the program to operate. This is a serious limitation for many applications, because you must move the plug every time you switch between a laptop and desktop computer. In addition, the plug sticking out the back of the laptop makes both the plug and parallel port vulnerable. We suggest that you remove the plug whenever you move the computer.

Ease of Learning and Operation

AppleWorks users will immediately feel comfortable with SuperWorks. If you know AppleWorks

you will only need the SuperWorks manual to learn its protocol for macros and the syntax for communications setups.

Other computer users should find SuperWorks as easy to learn and use as AppleWorks. The program uses the same meaningful mnemonic key equivalents as AppleWorks and does not require you to use the otherwise meaningless Function Keys on the keyboard.

Documentation

SuperWorks' 226-page manual comes in a three ring, seven-inch by nine-inch binder. The manual is well written and serves as a reasonably comprehensive source of reference material; it offers adequate descriptions of most SuperWorks functions.

Unfortunately, the documentation does not include a tutorial, which will be missed by computer novices. We suggest that beginners start with an AppleWorks book such as *AppleWorks Made Easy* by Carol Matthews which will describe the different features and commands available in AppleWorks.

Our copy of the manual shows evidence of poor quality control. The manual has more than a dozen duplicate page numbers containing different content. In addition, the documentation includes numerous typographical errors.

SuperWorks offers AppleWorks-style help screens that are adequate, although not as comprehensive as the on-line support provided with most MS-DOS programs. There are two or three minor errors in the help screens, but most users will make minimum use of the on-line help system once they get started with the program.

Support

Remarkable Technologies offers one year of free, unlimited technical support on a non-800 number during normal business hours. However, company policies regarding future technical support are unclear. Our discussions with the company suggests that they are in the process of formulating a technical support policy for future years.

The technicians we called were knowledgeable and answered our questions. We consider SuperWorks' technical support "satisfactory".

Value

Although SuperWorks includes word processor, data base, spreadsheet, and telecommunications modules, it is difficult to justify SuperWorks' retail price of \$399 or its current selling price of \$199.

Competing products such as Microsoft Works, LotusWorks, and First Choice are all available for less than \$100 through mail order vendors.

Although these programs are larger and run slower than SuperWorks, they set a price standard against which buyers must compare the SuperWorks product. We rate SuperWorks' value as "fair".

Schools buying more than 20 copies of SuperWorks can get the program and the necessary protection "keys" for \$50 per machine. This is similar to the costs associated with using other popular (but not copy-protected) programs.

Conclusion

Notwithstanding the few shortcomings mentioned in this review, AppleWorks users will like SuperWorks. Its tight machine language programming makes it fast and convenient to run on slower PC's. Aside from its hardware protection scheme, the program is ideal for portable computers. Finally, the program's ability to accept AppleWorks files and its ease of use will make AppleWorks users comfortable in the MS-DOS environment.

However, SuperWorks is one of the few copy protected integrated programs on the market and is more expensive than competing MS-DOS programs. But the program is certainly worth a look by AppleWorks users migrating into the world of MS-DOS computing.

[Robert Netro is a computer consultant in Canton, Ohio specializing in small business applications and training. Dr. Warren Williams is on the faculty at Eastern Michigan University where he teaches courses in the Educational Technology program. William Davis is a high school teacher and educational computer consultant in Hinsdale, Illinois.]

[Until May 1, NAUG members can buy SuperWorks for \$150 plus \$5 s/h directly from Remarkable Technologies, 245 Pegasus Avenue, Northvale, New Jersey 07647; (800) 782-1955. Identify yourself as a NAUG member when you order.]

A Spreadsheet Expense Register

by Stan Hecker

While AppleWorks users debate whether to use the data base or spreadsheet module to maintain their financial records, developers continue to design easy-to-use and powerful financial templates for both AppleWorks modules. [Ed: See the article entitled "Data Base or Spreadsheet: Which One Should You Use" in the *AppleWorks Handbook: Volume Two* for a comprehensive discussion of this topic.]

This month's "Favorite Template" demonstrates how you can use the spreadsheet module to track your expenses, maintain your checking account balance, and collect data for an annual tax summary. The template is based on a model submitted by Irving Tessel of Los Angeles, California.

This template demonstrates the concurrent use of "windows" and "titles", and suggests practical applications for AppleWorks' @IF and @OR functions. Best of all, the application is prosaic and immediately understandable; you do not have to be an investment banker or Wall Street analyst to use this spreadsheet.

Figure 1 shows how the template looks on the AppleWorks screen. Figure 2 depicts the complete template.

Overview

As you can see from Figure 2, the template has three major sections. The upper left-hand segment of the template is the "Data Entry Area". You enter your expense information into these cells; formulas calculate your checkbook balance.

To the right is the "Work Area", which allocates

Figure 1: Financial Template on the Screen

```

File: BUDGET.SAMPLE                REVIEW/ADD/CHANGE                Escape: Main Menu
=====A=====B=====C=====D=====E=====F=====G=====H=====
 1|CATEGORY      CHECK #      PAYEE/DESCRIPTION      DEPOSIT  WITHDRAWAL  BALANCE
3|  5              1422 Mortgage Bank, Inc.              788.22   167.38
4|  6              1423 Humble Gas Utility              22.82    144.56
5|              Payroll Deposit              2488.16      2632.72
6|  3              1424 The Gap              187.65   2445.07
=====A=====B=====C=====D=====E=====F=====G=====H=====
53|CATEGORY      TYPE OF EXPENSE      BUDGET    USED    REMAINING
54|  1      Automotive-loan,gas,insurance,repair      430        0      430
55|  2      Charity-United Way,church              50        0      50
56|  3      Clothing              155      188      (33)
57|  4      Food-groceries,lunches              400        0      400
58|  5      Housing-loan,taxes,maintenance              850      788      62
59|  6      Utilities-heating,electricity,water      120      23      97
60|  7      Medical-doctors,prescriptions              50        0      50
61|  8      Entertainment,vacation,social,video      150        0      150
62|  9      Education-tuition,books,supplies              50        0      50
63| 10      Miscellaneous-stamps,computer              100        0      100
64|              TOTAL MONTH'S BUDGET & EXPENSES      2,355      999    1,356
=====
G6: (Value) 187.65
Type entry or use ␣ commands
326K Avail.

```

the expenses in the Data Entry Area to the correct budget category. For example, the data in row 3 depicts a housing expense that you allocated to category 5. The template copies the amount of the expense into cell M3. Later you will sum the values in column M to determine the amount of money you spent on housing.

The bottom of the template is the "Summary Area" which displays the amount budgeted and spent in each category. You enter the "Budget" amounts as values and the template calculates the "Used" and "Remaining" values.

As you can see from Figure 1, only the Data Entry and Summary areas appear on the screen. Although the Work Area is essential to the template, there is no need to display the Work Area data.

Assumptions

I will assume that you know how use AppleWorks' spreadsheet module. If you are not comfortable with spreadsheets, I suggest that you read the

File: =====A=====B=====C=====D=====E=====F=====G=====H=====I=====J=====K=====L=====M=====N=====O=====P=====Q=====R=====																Page 1
1	CATEGORY	CHECK #	PAYEE/DESCRIPTION	DEPOSIT	WITHDRAWL	BALANCE	1	2	3	4	5	6	7	8	9	10
2			Starting Balance ----->			955.60										
3	5	1422	Mortgage Bank, Inc.		788.22	167.38	0.00	0.00	0.00	0.00	788.22	0.00	0.00	0.00	0.00	0.00
4	6	1423	Humble Gas Utility		22.82	144.56	0.00	0.00	0.00	0.00	0.00	22.82	0.00	0.00	0.00	0.00
5			Payroll Deposit	2488.16		2632.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	3	1424	The Gap		187.65	2445.07	0.00	0.00	187.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	CATEGORY		TYPE OF EXPENSE	BUDGET	USED	REMAINING										
31	1		Automotive-loan,gas,insurance,repair	430	0											

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Figure 3: Enter these Labels

File: Budget		REVIEW/ADD/CHANGE		Escape: Main Menu	
=====A=====B=====C=====D=====E=====F=====G=====H=====					
1	CATEGORY	CHECK #	PAYEE/DESCRIPTION	DEPOSIT	WITHDRAWAL BALANCE
2			Starting Balance	----->	
3					
4					
5					
=====A=====B=====C=====D=====E=====F=====G=====H=====					
53	CATEGORY			BUDGET	USED REMAINING
54		Automotive--or your choice			0 0
55		Charity--or your choice			0 0
56		Clothing--or your choice			0 0
57		Food--or your choice			0 0
58		Housing--or your choice			0 0
59		Utilities--or your choice			0 0
60		Medical--or your choice			0 0
61		Entertainment--or your choice			0 0
62		Education--or your choice			0 0
63		Miscellaneous--or your choice			0 0
64		TOTAL MONTH'S BUDGET & EXPENSES		0	0 0

H2:					
Type entry or use ⌘ commands					
327K Avail.					

3. Use the Apple-L command to change the width of the following columns:

A. Narrow column A to four characters.

B. Narrow column B to six characters.

C. Narrow column D to one character.

D. Widen column E to 27 characters.

Put the cursor in cell A1; column H should be visible at the right-hand edge of the AppleWorks screen. Make any adjustments by changing the width of column E.

booklet entitled *How to Get Started with the Spreadsheet Module*, which costs \$7.50 plus \$1.75 s/h from NAUG.

The template will work with all versions of AppleWorks.

Limitations

The template has two limitations. First, the model offers only ten budget categories. You can add more categories, but then all the categories will not fit at the bottom of the screen, which eliminates one of the attractive features of the template.

Second, the template uses a lot of desktop memory; fifty transactions will stretch the capacity of a 128K computer.

Starting the Template

Follow these steps to build the template. Issue Apple-S commands often as you work. [Ed: A working template appears on this month's issue of NAUG on Disk, which costs \$10 from NAUG.]

1. Create an AppleWorks spreadsheet called BUDGET.
2. Use the Apple-V command to set recalculation order to "Rows", recalculation frequency to "Manual", and to set the default value format to "Fixed" with two decimal places.

4. Enter the labels shown in Figure 3. Note that Figures 1 and 3 show a "split" screen, with two windows displayed in each figure. You will create these windows later; for now, just scroll down to row 53 and below to enter the second set of labels.

Use your own categories for the budget categories. For examples, "Automotive" can be "Hobbies", "Taxes", or "Grandchildren", depending on your needs.

5. Use the Apple-L command to center the labels in rows 1 and 53.
6. Use the Apple-L command to set the block of cells in A54 through G64 to a value format of "Commas" with no decimal places.
7. Enter the numbers 1 through 10 in cells A54 through A63.

Enter the First Row of Formulas

8. AppleWorks 3.0: Enter the formula `@IF (@OR (F3>0, G3>0), +H2+F3-G3, "")` in cell H3. This formula says:

"If there a value in the 'deposit' cell or the 'withdrawal' cell, this line is in use. Therefore, calculate a new balance by adding the deposit (if any) to the previous balance, and subtracting the check

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amount (if any) from the sum. Display a blank if there is neither a deposit nor a withdrawal."

This formula demonstrates how you can use @IF and @OR functions in AppleWorks 3.0 to suppress the display of zeros.

AppleWorks 1.x and 2.x: Enter the formula **+B2+F3-G3** in cell H3.

9. Enter the formula **@IF(A3=1,G3,0)** in cell I3. This formula will cause the amount in cell G3 to appear in cell I3 if this is an "Automotive" transaction. Otherwise, cell G3 will contain a zero.
10. Enter the following formulas into the cells indicated below. You can type them all, or use Apple C and Apple-U after you type the first formula:

Cell	Formula
J3	@IF(A3=2,G3,0)
K3	@IF(A3=3,G3,0)
L3	@IF(A3=4,G3,0)
M3	@IF(A3=5,G3,0)
N3	@IF(A3=6,G3,0)
O3	@IF(A3=7,G3,0)
P3	@IF(A3=8,G3,0)
Q3	@IF(A3=9,G3,0)
R3	@IF(A3=10,G3,0)

These formulas collect the data for each budget category. For example, cell M3 says:

"If the value in cell A3 is a 5, then the transaction was a housing expense. We accumulate housing expenses in this column. Therefore, copy the amount of the withdrawal into this cell if the value in cell A3 is a 5. Otherwise, make the value of this cell equal to zero."

AppleWorks 3.0 users can substitute two quotation marks for the final zeros in these formulas. [Ed: The formula in cell I3 would read **@IF(A3=1,G3,"")**.] That approach leaves the cells blank instead of displaying a zero. However, since these columns are in an "off screen" work area, and since this technique does not work with early versions of AppleWorks, there is really no point to using the "blank cell" procedure.

Figure 2 contains numbers in row 1 to indicate which column collects the values for each budget category. If you do that, use the Apple-L

command to format these values to a Fixed format with zero decimal places.

Duplicating the Rows

11. Copy row 3 to rows 4 through 52 and make all cell references "relative". That will expand the worksheet to accommodate 50 transactions. You can expand the worksheet to accept as many transactions as your computer's desktop space will allow.

The Work Area in your template should now look like the example in Figure 2.

Summary Formulas

12. Now enter the following formulas that compute how much you spent in each budget category.

Cell	Formula
G54	@SUM(I3...I53)
G55	@SUM(J3...J53)
G56	@SUM(K3...K53)
G57	@SUM(L3...L53)
G58	@SUM(M3...M53)
G59	@SUM(N3...N53)
G60	@SUM(O3...O53)
G61	@SUM(P3...P53)
G62	@SUM(Q3...Q53)
G63	@SUM(R3...R53)

Next, you will enter the formulas that calculate the difference between the amount you budgeted and how much you spent in each category.

13. In cell H54, enter the formula **+F54-G54**.
14. Copy the formula down through cell G63; use the "Relative" option.
15. In cell F64, enter the formula **@SUM(F54...F63)** to compute the total amount you budgeted.
16. Copy the formula from cell F64 into cell G64; use the "Relative" option.
17. In cell H64, enter the formula **+F64-G64** to determine the difference between the amount you budgeted and how much you spent during the month.

Formatting Cells

18. Use the Apple-L command to set the value format for the block of cells between cells A3 through A52 to "Fixed" with zero decimal places.

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Repeat this process for cells C3 through C52.

Protect Your Work

Now you will protect the entire spreadsheet so nothing can be entered anywhere. Then you will lower the level of protection where you want to enter data.

19. Issue an Apple-L command and set the protection for the entire spreadsheet (the block of cells from A1 through R64) to "Nothing".
20. Put the cursor in cell A3, issue another Apple-L command, and set the protection for the block of cells from A3 to A52 to "Values Only".
21. Repeat this procedure for cells C3 through C52, cells F3 and G52, and for cell H2.
22. Set the level of protection for cells E3 to E52 to "Labels Only".
23. Set the protection for cells F54 through F63 to "Values Only".

Windows and Titles

Part of the attraction and utility of this template is the use of windows and titles. [Ed: A complete description of windows and titles appears in the article entitled "How to Use Apple-T and Apple-W" in the December 1991, issue of the *AppleWorks Forum*.]

As you can see from *Figure 1*, the template allocates the upper third of the screen for the data entry window. That leaves the remainder of the screen for a window that displays the results. The lower part of the screen also reminds you of the code assigned to each budget category.

Follow these steps to set the windows and titles:

1. Scroll down the screen until cell A65 appears in the lower left-hand corner of the screen.
2. Move the cursor to cell A53 without scrolling the screen.
3. Set the window by issuing an Apple-W command and specifying "Top and Bottom".
4. Issue an Apple-J to "jump" to the top window, and an Apple-1 to bring cell A1 into the upper left-hand corner of the screen.
5. Move the cursor to cell A2 without scrolling the screen.

6. Issue an Apple-T and specify "Top". That locks the first spreadsheet row as a title at the top of the screen; that row will remain on the screen to guide you as you enter data.

Check Your Work

Now it is time to check your work. Follow these steps:

1. Issue an Apple-S command to save the template.
2. Issue an Apple-N command and change the name of the file so you do not accidentally overwrite the blank template with a file that contains your sample data.
3. Enter the data that appears in *Figure 2*.
4. Issue an Apple-K command, print the template, and check if your output matches the data in *Figure 2*.
5. Remove the sample template from the desktop without saving the file.

Finally, use TimeOut FileMaster, Copy II+, or the Apple Utilities to lock the template. [Ed: See the article entitled "How to Lock Your Templates" in the May 1991 issue of the *AppleWorks Forum*.]

Using the Template

There are a number of ways to use the template. For example, follow these steps to use the template as a monthly checkbook register and expense log:

1. Load the template onto the desktop and change its name to something meaningful, such as "Expen.4.92".
2. Put your starting checkbook balance in cell H2.
3. Issue an Apple-J command and enter your monthly budget allowances in cells F54 through F63. [Ed: Or use the *AppleWorks 3.0* clipboard to copy those values from your previous month's budget.]
4. Issue another Apple-J command to return to the top window on the screen. Then enter the category in column A and the transaction data across the row, just as if the spreadsheet were a checkbook register.
5. Issue an Apple-K command to calculate the

My Favorite Template...

checkbook balance and to see if you overspent in a budget category. The 50-transaction template takes less than 15 seconds to recalculate on an unaccelerated Apple IIc or IIe.

Conclusion

This financial template will not resolve the differences between those who advocate using AppleWorks' data base and spreadsheet modules to manage their finances. However, the template does demonstrate an instructive and interesting use of the AppleWorks spreadsheet module.

[Stan Hecker is on the administrative staff at Michigan State University, East Lansing, Michigan, and is a partner in H&H Consulting, a Michigan concern specializing in school district financial and population analyses. Irving Tessel is a retired CPA who develops his templates using //E-Z Pieces on an Apple III computer.]

1040Works Update

Here are notes for 1040Works users:

1. Remember that 1040Works does not compute taxes correctly if your income is less than \$25.
2. Add the OMB form number to Schedule SE Person 1 and Person 2 as follows (make these entries in MODULE.X (1040Works-X) or MODULE.ONE (1040Works) ["^" signifies a space]):
Cell H14 and K14 should contain "T^^^OMB^NO."
Cell I14 and L14 should contain "^1545-0074".
3. 1040Works users: Remember to specify "values only" when you copy the contents of the Data Transfer Port from the clipboard. AppleWorks 1.x users should change the formula in cell J265 in MODULE.ONE to:
@IF(A262=1,J264+B194,J265).
4. IRS approval for the 1040Works forms arrived too late for NAUG to incorporate the approval number in the templates or the documentation. Please write "D285" (the IRS approval number) in the lower left-hand corner of all 1040Works forms you submit to the IRS except Form 1040 and Form 8283. Cross out the old approval number (D124) on Schedule A, B, and D, and Form 2441.
NAUG has not yet received approval for Form 8283. We suggest that you use an official Form 8283 pending IRS approval of the 1040Works version of the form.
5. The 1040Works support line is answered between 8AM - 5PM Pacific Time.
6. Tax Planner: Cell J28 in the C1.ESTIMATE.TAX file should read @CHOOSE(C18+1..., not @CHOOSE(C3+1....

Special Offers

Special Offers for NAUG Members

Steve Beville

Report Transporter is Steve Beville's new macro-driven TimeOut application that copies a report format from one data base file to another. That makes it easy to duplicate report formats created for one data base when working with a new data base file. The source and receiving files can have different numbers of categories and different category names. Report Transporter transfers printer options, totals, and group totals with the report.

Report Transporter is compatible with TotalControl and DoubleData 2.0 from JEM software. It requires AppleWorks 3.0 and UltraMacros 3.1.

Report Transporter lists for \$19.95. NAUG members can buy Report Transporter directly from the author for \$15 plus \$2 s/h in the U.S., \$3 s/h to Canada, and \$5 to other countries. The developer does not accept credit cards; include a check and your NAUG membership number with your order.
[Steve Beville, 3392 Glenn Springs Road, Spartanburg, South Carolina 29302; (803) 582-3687.]

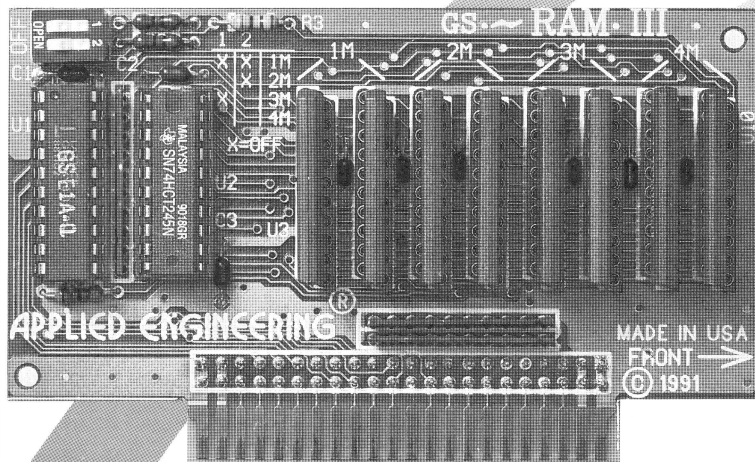
TMS Peripherals

NAUG recently tested a TMS 52-megabyte hard drive connected to an Apple SCSI card in an Apple IIGs computer. The drive was quiet, fast, and reliable. All TMS drives are also compatible with Macintosh computers. Until May 1, NAUG members can get the following special prices on TMS external hard disk drive systems:

TMS Pro 52-LPS	\$279
TMS Pro 105-LPS	395
TMS Pro 170	599
TMS Pro 210	689
TMS Pro 425	1339

These prices, which are \$50 - \$130 less than the company's regular discount prices, include the necessary SCSI cable, a 30-day "Performance Guarantee", and a two-year warranty. You must identify yourself as a NAUG member for this special offer.
[TMS Peripherals, 1120 Holland Drive, Suite 16, Boca Raton, Florida 33487; (800) 275-4867; (407) 998-9958. Fax: (407) 998-9983.]

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How to Do Mathematics in the Word Processor

by Keith Johnson

One of the differences between intermediate and advanced AppleWorks users is the advanced user's ability to integrate the three AppleWorks modules. In part, you find this reflected in the advanced users' readiness to transfer data between the AppleWorks modules.

Robert McClelland takes this power to a higher level by writing macros that automate the transfer of data within AppleWorks. For example, his Mathematics Macro (which appears in Mr. McClelland's commercial collection of "Soup Up Classic!" macros) lets users access the mathematical processing power of AppleWorks' spreadsheet module while using AppleWorks' word processor (see *Figure 1*).

Specifically, this macro computes the value of a mathematical expression you type into a word processor document. The macro uses the clipboard to copy the expression to a spreadsheet, then copy the result back to the word processor.

Figure 1: Mathematics Macro

```
C:<awp><      { Define the macro. }
right :      { Ensure that the cursor is past the first character. }
oa-left :    { Jump back to the beginning of the expression. }
oa-C>t<      { Invoke the "Copy to the clipboard" command. }
oa-right : rtn : { Highlight the expression and copy it. }
down : first : { Go to the next line, which should be blank. }
sa-U :      { Copy the expression from the clipboard. }
cell :      { Read the expression into variable $0. }
sa-Y :      { Delete the new line from the word processor. }
up : last :  { Move the cursor to the end of the previous line. }
sa-l :      { Store the name of the word processor file in variable q. }
oa-Q : esc : { Return to the Main Menu. }
rtn>5<rtn : rtn>XS<rtn : { Create a new spreadsheet called "XS". }
print $0 : rtn : { Enter the expression stored in $0 into cell A1. }
oa-L : rtn>vc2<rtn : { Set the value format to commas, 2 decimal places. }
oa-C>tb<rtn : { Copy the result to the clipboard. }
oa-Q : esc   { Return to the Main Menu. }
>4<rtn : rtn>3<rtn>y< { Remove the spreadsheet from the desktop. }
sa-2 :      { Return to the original word processor file. }
spc :      { Add a space to the end of the expression. }
insert :    { Turn on the insert cursor. }
>=<spc :    { Add "=" and another space. }
sa-U :      { Copy the result from the clipboard. }
find :      { Go to the next Return character. }
zoom :      { Turn off the display of the printer options. }
down : sa-Y : { Go down to the last line and delete it. }
up : last : left>! { Put the cursor to the right of the expression. }
```

Figure 2: Other Macros

U:<all><oa-C>F!	{ Copy "From the clipboard". }
Y:<all><first : oa-M>T<down : left : rtn>!	{ Delete the current line. }
1:<all><q = peek #openfile : oa-Q : esc>!	{ Store the name of the current line in { variable q and return to the Main Menu. }
2:<all><oa-Q : print q : rtn>!	{ Return to the filename stored in variable q. }

The macro requires an UltraMacros-enhanced copy of AppleWorks 3.0 running on an Apple II system equipped with either 256K or more of RAM, a 3.5-inch disk drive, or a hard drive.

How to Use the Macro

1. Add the macro to your default set.
2. Make certain that your macro set includes the <sa-U>, <sa-Y>, <sa-1>, and <sa-2> macros in the UltraMacros default set. If not, either type in the macros in *Figure 2* or copy them from the file /ULTRAMACROS/FILES.FOR.V3.0/MACROS ULTRA.3.0 on the UltraMacros disk.
3. Compile the macros. Use Macro Options to make this your default set if you want this macro available when you launch AppleWorks.
4. Type a mathematical expression in a word processor file. (An expression is two or more numbers separated by mathematical operation symbols, such as 47.3*18-2.76.) Do not leave spaces within the expression. Do not type an "=" sign. Precede functions such as SUM, AVG, and SQRT with an "@" sign and follow the syntax you usually use to enter a formula into a spreadsheet cell.

You can enter any expression that is accepted in the spreadsheet environment. Remember that all operations are carried out from left to right, unless you use parentheses to group operations, as in (23.4+7.9)*(16-4.8). Refer to the AppleWorks Reference Manual for more information.

Examples of legal expressions include "3+4", "@SQRT(9)", and "@AVG(23,45,12)".

Illegal expressions include "@AVG(B1,B2)"

(cells references are not allowed in formulas), "4 + 5" (blank spaces not allowed in formulas), and "SUM(3,4,5)" ("@" required before functions).

5. Put the cursor anywhere in the expression or on the space immediately following the expression and press <sa-C>. The macro will open a new spreadsheet, transfer the expression to cell A1, copy the result back to the word processor file after printing a "=" symbol, and remove the spreadsheet from the desktop.

You should invoke the macro before typing anything after the expression.

Features, Details, and Alterations

This macro creates a new spreadsheet, transfers the data between modules, does the calculations, and removes the spreadsheet from the desktop. Make certain you have enough room for the additional spreadsheet on the desktop before you launch the macro.

I think you will be surprised at how fast AppleWorks performs these operations. The calculations take less than five seconds on an Apple IIGS running at its normal 2.8-megahertz speed, less than three seconds on an Apple IIe equipped with a 4-megahertz Zip Chip, and 14 seconds on a 1-megahertz Apple IIe. You may be able to haul out a calculator, punch in the figures, and beat that time – but not by much.

You can speed up the macro by preloading the spreadsheet module when booting AppleWorks. Otherwise, the macro will wait while AppleWorks loads the spreadsheet program into memory.

Of course, you can modify this macro to suit your personal style. For example, you can include

My Favorite Macro...

spaces in the mathematical expressions if you change the first "oa-right" in the macro to "last". But then you must be careful not to type anything after the expression before running the macro.

You can revise the macro so it leaves the new spreadsheet on the desktop. But then the macro must determine whether the file is on the desktop before creating a new spreadsheet. This is possible, but adds steps to the process.

You will have to make major modifications if you want to use the macro on a 128K Apple II equipped with only 5.25-disk drives; the macro does not let you swap disks while it loads the different modules.

Randy Brandt [Ed: the author of *TimeOut Ultra-Macros*] suggests that you add "display Ø" at the beginning of the macro to freeze the display while you run the macro. Then you will not see AppleWorks switching between modules. Remember to restore the display by adding "display 1" just before the last "sa-U".

The macro sets the format of the spreadsheet so that the answer has commas and two decimal places. You can change these settings to suit your preferences.

Conclusion

This macro gives AppleWorks' word processor the calculating power found only in the latest versions of expensive dedicated MS-DOS word processing programs. Not everyone needs "word processor mathematics". But even if you don't use this macro, it is an excellent example of the power of integration possible with AppleWorks and UltraMacros.

[Keith Johnson is Associate Director of the Fleischmann Planetarium at the University of Nevada. Robert W. McClelland writes software for Beaumont Software, which markets *Soup Up Classic!*.

A description of Soup Up Classic! appears in the August 1990 issue of the AppleWorks Forum. Soup Up Classic! costs \$19.95 plus \$3 s/h from Beaumont Software, 13540 Inwood, Beaumont, Texas 77713; (409) 753-3641. A working copy of this macro appears on this month's NAUG on Disk, which costs \$10 from NAUG.]

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The Grading Machine: A Better Gradebook

by John Carson

Ask most teachers what they like about teaching and they will tell you “working with kids”, “seeing children learn”, and “being around students”. Ask teachers what they don’t like and you will often hear “grading homework”, “doing the paperwork”, and “calculating grades”.

Although no program can make grading homework and tests enjoyable, a well designed gradebook program can reduce the tedium involved in keeping student records. Gradebook programs can also make it easier to track student performance and can encourage you to give your students more feedback about their grades and performance.

Unfortunately, gradebook programs can also be inflexible, forcing you to use a particular type of grading system or requiring you to weight your grades in a way that is determined by the program. They can be frustrating to use by making it difficult to enter or delete a grade. Poorly designed gradebook programs can be time-consuming and difficult to learn.

Flexibility

The Grading Machine is a set of gradebook templates and macros that use AppleWorks to create a powerful, easy-to-use, flexible gradebook spreadsheet. The Grading Machine includes macros that adjust the break points for letter grades, let you designate “E” or “F” as the failing grade, and choose between four, five, and six-point grading systems.

Figure 1: Gradebook Set-Up Example

File: ENGLISH.201		REVIEW/ADD/CHANGE		RETURN: MAIN MENU	
=====A=====		=====B=====		=====C=====	
10		Maximum Scores Below Titles			
11		Weights Below Maximum Scores			
12					
13			TEST 1	TEST 2	TEST 3
14 ENGLISH 201, FALL 1991			50.0	100.0	40.0
15 NAME		IDENTIFIER	.4000	.2000	.2500
16 -----			-----	-----	-----
17 BOGART, HUMPHREY		012-09-3456	49.0	92.0	35.0
18 BOOP, BETTY		123-09-8903	36.0	77.0	29.0
19 CHAPLIN, CHARLIE		345-98-1234	45.0	88.0	
20 GREENSTREET, SYDNEY		789-76-3456	40.5	79.0	33.0
21 TEEN, HAROLD		565-34-5487	31.0	62.5	25.0
22 TOUHY, APPLE		654-23-4567	34.0	77.0	31.0
23 TRACY, DICK		465-98-3487	36.0	73.2	29.0
24					
25					
26					
27					

A19		Type entry or use ⌘ commands		120K Avail.	

The Grading Machine includes two templates, both of which can calculate numeric grades and convert the numbers to letter grades. One template converts the numbers to straight letter grades (A, B, C, etc.); the other supports plus and minus grades such as A- and B+.

After you install the macros, all you do is load the desired template onto the AppleWorks desktop, rename the file, and enter the student names, test and assignment titles, the weight assigned to each score segment, and the students’ scores (see *Figure 1*). The Grading Machine accepts grades for homework, effort, quizzes, and anything else you desire.

Then you activate the macros and The Grading Machine builds the spreadsheet. The results include percentages, letter grades, high, low, and average scores for each assignment and for the cumulative student marks (see *Figures 2 and 3*).

Figure 2: Sample Output

ENGLISH 201	TEST 1	TEST 2	TEST 3	EXAM	EXTRA	WEIGHTED	LTR
FALL 1991	50.0	100.0	40.0	100.0	100.0		
NAME	.4000	.2000	.2500	.5000	.2000	AVERAGE	GRADE
BOGART, HUMPHREY	49.0	92.0	35.0	90.0	86.0	90.79%	A
BOOP, BETTY	36.0	77.0	29.0	82.0	24.0	69.04%	D
CHAPLIN, CHARLIE	45.0	88.0		90.0	59.0	77.00%	C
GREENSTREET, SYDNEY	40.5	79.0	33.0	88.0	74.0	82.54%	B
TEEN, HAROLD	31.0	62.5	25.0	63.0	92.0	67.54%	D
TOUHY, APPLE	34.0	77.0	31.0	79.0	82.0	77.21%	C
TRACY, DICK	36.0	73.2	29.0	74.2	77.0	73.99%	C
SEGMENT:	TEST 1	TEST 2	TEST 3	EXAM	EXTRA	AVERAGE	
	----	----	----	----	----	----	
HIGHEST	49.0	92.0	35.0	90.0	92.0	90.79%	
LOWEST:	31.0	62.5	25.0	63.0	24.0	67.54%	
AVERAGE:	38.8	78.4	30.3	80.9	70.6	76.87%	
GRADE DISTRIBUTION	PERCENT					LETTER GRADE	BREAK POINTS
NBR A'S:	1	14.29%				A	90.00%
NBR B'S:	1	14.29%				B	80.00%
NBR C'S:	3	42.86%				C	70.00%
NBR D'S:	2	28.57%				D	60.00%
NBR E'S:	0	0.00%				E UNDER	60.00%
TOTAL NBR:	7	100.00%					
CLASS GPA:	2.14	4.00					

Figure 3: Student Summaries

ENGLISH 201	TEST 1	TEST 2	TEST 3	EXAM	EXTRA	WEIGHTED	LTR
FALL 1991	50.0	100.0	40.0	100.0	100.0		
NAME	.4000	.2000	.2500	5000	.2000	AVERAGE	GRADE
BOGART, HUMPHREY	49.0	92.0	35.0	90.0	86.0	90.79%	A
BOOP, BETTY	36.0	77.0	29.0	82.0	24.0	69.04%	D
CHAPLIN, CHARLIE	45.0	88.0		90.0	59.0	77.00%	C
GREENSTREET, SYDNEY	40.5	79.0	33.0	88.0	74.0	82.54%	B
TEEN, HAROLD	31.0	62.5	25.0	63.0	92.0	67.54%	D
TOUHY, APPLE	34.0	77.0	31.0	79.0	82.0	77.21%	C
TRACY, DICK	36.0	73.2	29.0	74.2	77.0	73.99%	C

The Grading Machine offers different ways to report student grades. For example, you can print the block of data which includes the students' scores, weighted averages and letter grades. You can delete the student names for privacy, photocopy the printout, and give a copy to each student after putting a check mark beside his or her record. This lets each student compare his or her grades to all the other students in the class.

Alternatively, you can print the data triple-spaced and tear off a strip for each student. The documentation also includes directions that describe how to use the data to produce mail merge reports.

Macro Features

The Grading Machine comes with a complete set of macros and a run-time version of TimeOut UltraMacros. That lets AppleWorks users who do not own UltraMacros use all the macros on the disk.

The macros automate most routine tasks. For example, one set of macros inserts nine rows at a time (for adding students to the class list) or up to 10 columns at a time (for inserting marks). Other macros delete blank rows from the bottom of the class list and eliminate all macro markers from the spreadsheet before printing. Another macro deletes a student from the list and stores the student's record for future reference. Yet another macro lets you adjust a student's mark to account for an excused absence and stores the record to keep track of the adjustment.

Macros also make it easy to position the students' names beside their final marks for printing, sort alphabetically or numerically on any column, and automatically correct the gradebook formulas after sorting. This is of particular importance because it is during a sort that a spreadsheet is most likely to get scrambled.

Although many of the above macro-enhanced features are available within AppleWorks, The Grading Machine's macro-controlled environment protects the integrity of your data.

Ease of Operation

AppleWorks novices will find it easy to learn and use The Grading Machine, provided they read the documentation, go through the tutorial, and read the various onscreen instructions and warnings as they proceed. All the user needs to know is how to boot AppleWorks and load a file onto the desktop, how to enter labels and values (even this is explained in the documentation), and how to follow simple instructions. There is a Help Screen file of quick

Software Review...

macro references that you can load onto the desktop and access instantly with an Apple-Q command (see *Figure 4*).

Installing The Grading Machine is a quick and easy menu-driven process which takes less than a minute (see *Figure 5*).

Hardware Requirements and Compatibility

The Grading Machine requires AppleWorks 2.0 or later running on an Apple IIe, IIC, or IIGs computer equipped with at least 128K of memory. The Grading Machine is compatible with most AppleWorks enhancements, including all the TimeOut enhancements, Applied Engineering's Desktop Expander, and Checkmate's Desktop Expander, as long as you install The Grading Machine *after* you install your other enhancements.

Documentation

The on-disk documentation is clear, easy to read, and comprehensive. The documentation includes an excellent tutorial that describes how to set up a gradebook and how to use the macros. The documentation also describes how to customize the gradebook, how to import data from DIF or data base files, how to use mail merge, and how to obtain attractive output. A section for experienced AppleWorks users contains shortcuts, cautions, and excellent instructions that describe how to use weighting factors. Finally, the documentation includes a Quick Reference Card that lists all the macros provided with the templates.

Quality of Support

My calls to Stein Consulting were answered by Mr. Stein himself. If he was not in when I called, I left a message and he returned the call the same day.

Figure 4: Help Screen

```
File: HELP.SYSTEM          REVIEW/ADD/CHANGE          Escape: Main Menu
=====
SA-1: The Master Macro Command.
SA-2: Adjusts Letter Grades Based on Weighted Average.
SA-3: Reconstructs Summary Area Below Students' Records.
SA-4: Sets Up the Spreadsheet for 4.00 Grading System.
SA-5: Sets Up the Spreadsheet for 5.00 Grading System.
SA-6: Sets Up the Spreadsheet for 6.00 Grading System.
SA-A: Controls Sorting on a Column.
SA-B: Positions Cursor for Entering Break Points for Grades.
SA-C: Copies Students' Names to Right Hand Names Column.
SA-D: Stores Student's Record and Deletes it From the List.
SA-E: Sets Up the Spreadsheet for "E" Failing Grade.
SA-F: Sets Up the Spreadsheet for "F" Failing Grade.
SA-L: Lookup Macro for Finding Names and Entering Scores.
SA-N: Changes the Number of Course Segments and Reconfigures.
SA-R: Inserts 9 Rows for Students' Records in Proper Position.
SA-S: Removes Blank Rows From the End of Student-Record List.
SA-T: Keeps Header and Names Column in Sight, Toggles (On-Off).
SA-W: Stores Student's Record and Adjusts a Segment Score.
SA-X: Sets Segment Number for Entering Students' Scores.
SA-Control-Z: Deletes all Macro Markers from Spreadsheet.
-----
Type entry or use ⌘ commands          Line 80  Column 1          234K Avail.
```

Figure 5: Installation Screen

```

      TimeOut UltraMacros
      TaskMaster Version
      :
      :
      Copyright 1987 Randy Brandt
      Beagle Bros. Inc.
      :
      :
      THE GRADING MACHINE INSTALLATION MENU
      :
      :
      I - Install THE GRADING MACHINE
      C - Change the Cursor Blink Rate
      Q - Quit the Installation Program
      :
      :
      Make a Choice:      Press "I", "C", or "Q":
```

When I encountered a bug in the installation program, Mr. Stein described how to eliminate the problem. He also mailed me the latest bug-free version and phoned a week later to make sure it had arrived.

Limitations

Although The Grading Machine provides the type of gradebook that most teachers want, it does not

Software Review...

generate sophisticated statistical output. For example, the templates compute averages, weighted averages, grade distributions, and the class grade-point average, but do not calculate T-scores, Z-scores, standard deviations, medians, or percentile ranks.

In addition, there are limits to the size of the gradebooks you can create. First, the gradebook must fit within the 127 columns allowed by AppleWorks. Since The Grading Machine requires 10 columns for set-up, a maximum of 117 columns remain available for student grades; the program warns you if you attempt to exceed this limit.

Second, you must work within the desktop memory available on your system. The more memory in your computer, the greater the number of students and scores you can enter.

These limits are generous and should not pose problems for most teachers.

Working with The Grading Machine inspired confidence in its reliability. The macros worked as advertised and the latest version of the program never crashed into the monitor or produced other unpleasant surprises.

Conclusion

The Grading Machine is an exceptional gradebook application that works within AppleWorks. It is a simple, easy to use, flexible program that protects the integrity of your data and is a bargain at \$25. If you are looking for a gradebook, this enhancement is worthy of serious consideration.

[John Carson is a Special Education teacher who also teaches computer applications and desktop publishing courses through McGill University's Distance Education Program to teachers working in schools throughout Canada and to Amerindian teachers in Quebec.]

[The Grading Machine costs \$27.50 from Stein Consulting, 915 E. Burr Oak Drive, Arlington Heights, Illinois 60004; (708) 398-8544. Version 3.0 is current. Until June 1, 1992 NAUG members can buy The Grading Machine directly from the developer for \$16.95 postpaid or buy a single-building site license for \$49.95.]

Special Offers

A Special Offer from AnchorageARTS

AnchorageARTS produces the EDS:Software Directory, which lists special educational discount prices available for more than 300 Macintosh and MS-DOS-compatible programs. The discounts, which range from 10 - 90%, are available to educational institutions, educators, and students.

Products listed in the directory include Microsoft Excel for \$189 (\$395 list), PageMaker for \$199 (\$795 list), and Cricket Presents for \$60 (\$199 list).

The directory includes the name, address, telephone and fax numbers for each vendor, information about the availability of site licenses, classroom packs and student versions, and an indication of whether schools, faculty, and/or students qualify for the special prices (not all offers are available to all groups).

The EDS:Software Directory costs \$30. However, until June 1, NAUG members can order the catalog directly from the publisher for \$15 plus \$3 s/h. NAUG members who order at this special price will also receive a coupon that lets them order the next two catalog updates for \$30. Alternatively, NAUG members can subscribe for one year (three issues) for \$45 plus \$5 s/h.

To qualify for these prices, you must include your NAUG membership number and payment with your order. The company cannot accept credit cards or purchase orders at these special prices.

[AnchorageARTS, 33 University Square, Suite 217, Madison, Wisconsin 53715; CompuServe: 71237,764.]



Connect with the NAUG Bulletin Board

Call the Electronic Forum, NAUG's popular AppleWorks bulletin board. Be our 70,000th caller and win a year's extension to your NAUG membership. Call (615) 359-8238 at 300, 1200, or 2400 baud.

How to Use the Apple IIe Card Software – Part 2

by Nanette Luoma

The Apple IIe Card Software serves two functions. First, it lets all Macintosh computers read ProDOS disks. That makes it easy to import AppleWorks and other ProDOS data into MacWrite II, ClarisWorks, and other Macintosh programs that support Claris Corporation's Xtend technology.

Second, the software lets owners of Macintosh LC computers use an optional Apple IIe Card to run AppleWorks and other Apple II programs.

Last month, I described how to install the software, how to read ProDOS data disks on any Macintosh, and how to set aside a portion of your hard disk to store ProDOS files.

This month, I will describe how owners of Apple IIe Card-equipped Macintosh LC computers can configure the software to run AppleWorks and other ProDOS applications.

I will assume that you know how to use a Macintosh and that you followed the procedures in last month's article to install the software. I will also assume that you want to configure your system to run AppleWorks.

Getting Started

First you must decide whether you will run the software from an internal hard drive or from a floppy disk.

If you do not own a hard drive, your decision is made: You will run the software from a floppy disk.

Hard drive owners must determine if they run under System 6 or System 7, because the software does not run reliably under System 7.

If a cartoon-like "balloon" appears near the right-hand edge of the Menu Bar when you boot your

system, you are running System 7 and must use the Apple IIe Card Floppy Disk Startup Disk to boot your system. If no balloon appears, you are running System 6 and should launch the software from your hard drive.

Floppy disk users should make a backup copy of the Apple IIe Card Floppy Disk Startup Disk and use that backup for all the procedures described in this article. I will call that disk the "IIe Startup Disk".

The Configuration Process

Configuring your system to run the Apple IIe Card Software is a three step process. First, if you run MultiFinder, you must tell your system how much memory to allocate to the software. Second, you must choose a printer. Finally, you must configure the software so the card runs AppleWorks efficiently. I will proceed through these operations in a step-by-step fashion, starting with the steps necessary to allocate additional memory to AppleWorks.

This is a one-time process; you only go through these procedures the first time you use the software.

Configuring MultiFinder

[Ed: An icon appears on the upper right-hand corner of your screen if you run MultiFinder. If no icon appears, you are not running MultiFinder and should skip to the section entitled "Choosing a Printer".]

Apple Computer's MultiFinder makes it easy to switch between applications. The software developer determines how much memory MultiFinder automatically allocates to each program. Changing that value lets you allocate more memory to AppleWorks.

General Interest...

By default, the Apple IIe Card Software uses 768K of Macintosh memory, which provides a 256K AppleWorks desktop. No matter how much memory you add to your Macintosh, the IIe Card Software will allocate only 256K to the AppleWorks desktop unless you change that default setting.

AppleWorks users should follow these steps to change the allocated memory setting to accommodate a larger desktop:

1. Floppy Disk Users: Boot your computer with the IIe Startup Disk, double-click on the disk icon to open the disk, and click once on the IIe Startup icon to highlight that icon. Then proceed to step #2 below.
Hard Disk Users: Highlight the IIe Startup icon.
2. Issue a \mathbb{H} -I to display the Info Window (see Figure 1).
3. Double-click on the "Application Memory Size" box at the bottom of the screen. Enter "1024" if you have two megabytes of memory installed in your Macintosh. Enter "1500" if you have more than two megabytes of RAM in your computer.
4. Click on the Close Box.

That allocates enough memory to establish a 512K AppleWorks desktop on a two-megabyte Macintosh and a one megabyte AppleWorks desktop if you have more than two megabytes of memory in your computer.

Choosing a Printer

The next step is to tell your system where to send your printed output. Turn on your printer and continue as follows:

5. Pull down the Apple Menu and select "Chooser".
6. Click on the icon that represents your printer and then click on the Close Box (see Figure 2).

Configuring Your Apple II

Now you will launch the Apple IIe Card Software and configure the software so it simulates an Apple IIe. Follow these steps:

Figure 1: IIe Card Software Info Window

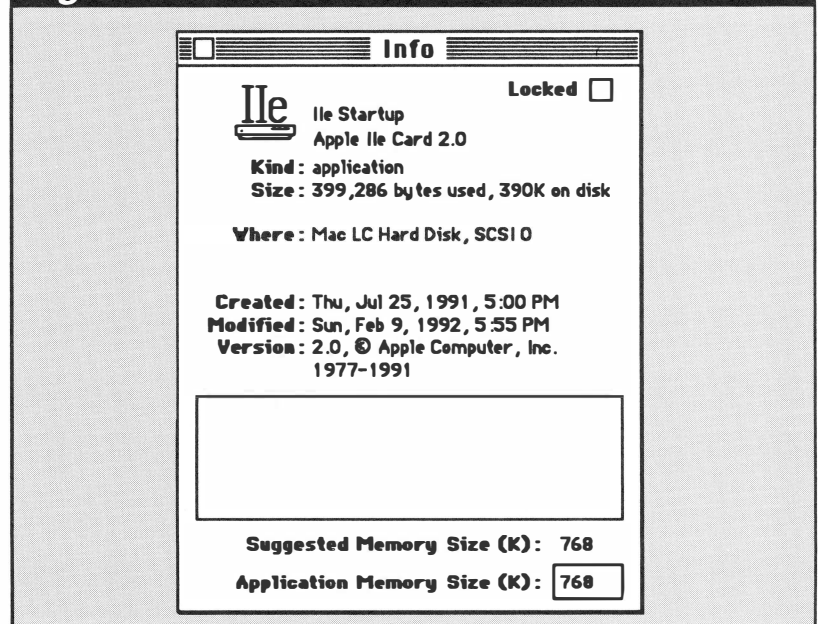
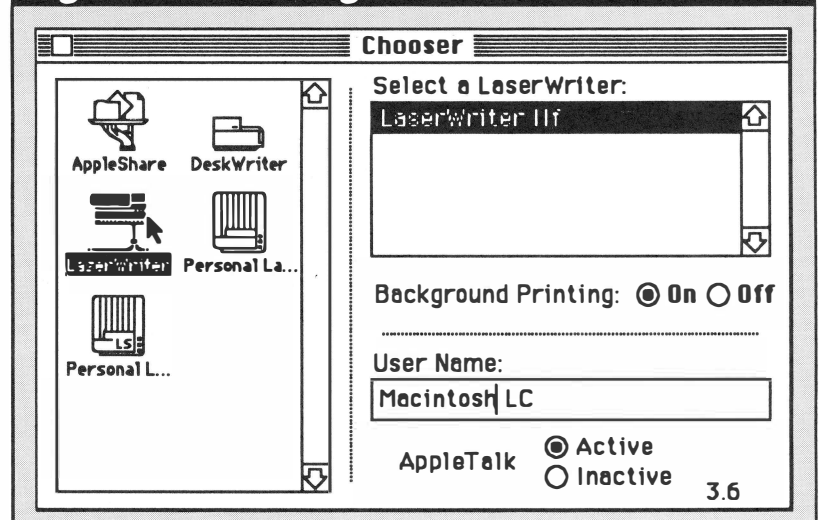


Figure 2: Choosing a Printer



7. Launch the Apple IIe Card Software by double-clicking on the IIe Startup icon.

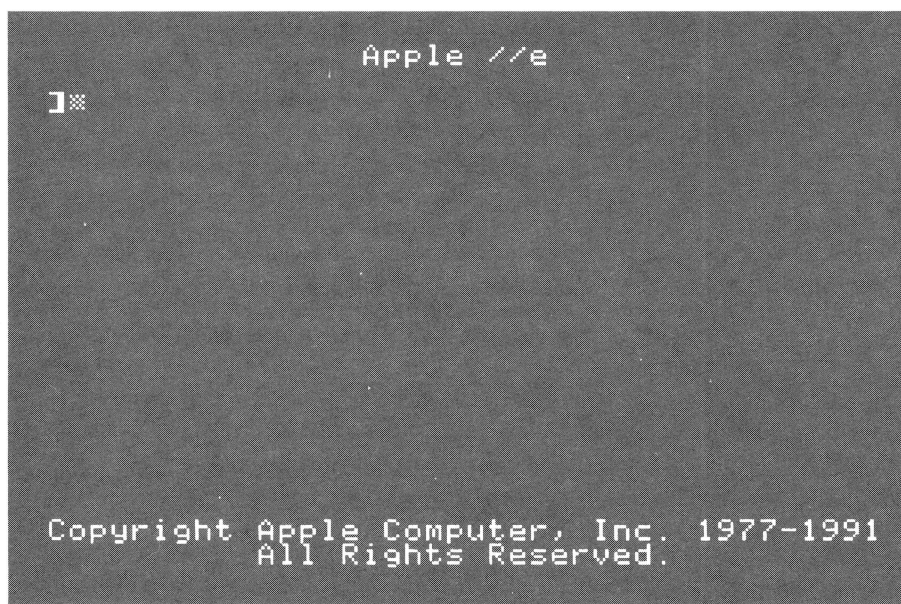
The IIe Card Software will activate the Apple IIe Card and display the screen that appears in Figure 3.

8. Issue a Control- \mathbb{H} -Escape (that is, press the Control, \mathbb{H} , and Escape Keys simultaneously) to access the IIe Option Panel (see Figure 4).

The IIe Option Panel

You use the IIe Option Panel to configure your Apple IIe computer. You select an icon, and the right side of the panel displays the settings associated with that icon.

Figure 3: The Apple IIe Screen



General: The “Startup Beep Sound Setting” controls the *type* of sound generated by the Apple II. You set the *volume* by selecting “Control Panel” from the Apple Menu.

“Type ahead” lets you type while the computer is processing. Leave type ahead set to “On” so you can enter data and formulas while AppleWorks redraws the screen.

The “Additional Option Panel Key” lets you define a second key combination that displays the Option Panel. Click on the Additional Option Panel Key Button and follow the on-screen directions to define the new key combination.

Memory Card: The Memory Card icon lets you control the amount of memory allocated to the Apple II Memory Expansion Card. Click on the Memory Card icon and set the value to 512K if you use a two-megabyte Macintosh or to 1024K if you have more than two megabytes of memory in your computer.

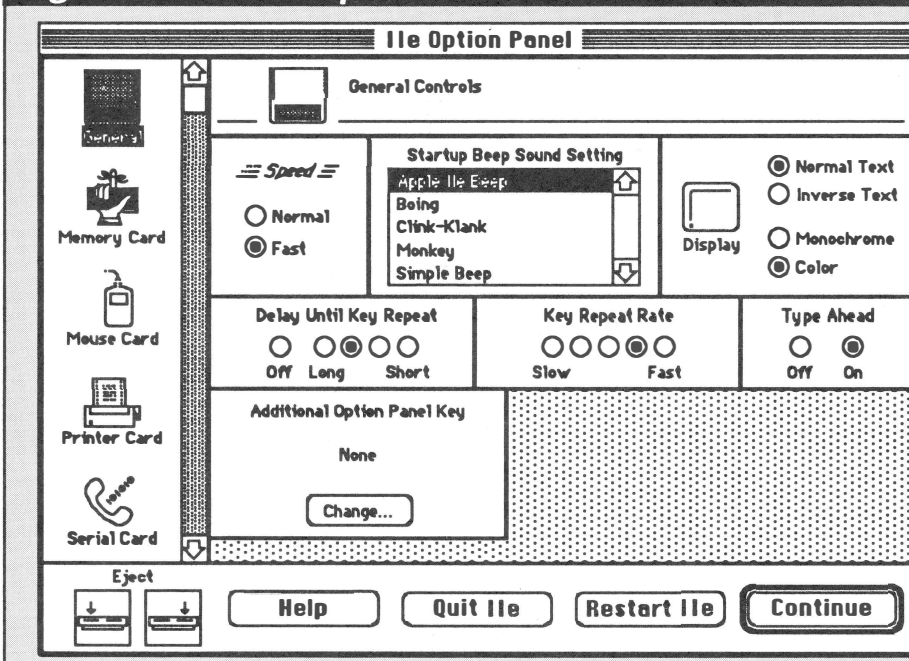
You must restart the Apple IIe Card to implement the new Memory Card setting.

Changes to the Memory Card setting can generate two types of error messages. A “Not enough memory to install card” message indicates that you either don’t have enough

memory in your computer (in which case, you should set the Memory Card size to a smaller value) or that you did not allocate the full 1500K bytes for the IIe Startup application as suggested earlier in this article.

A “Memory Card not installed” message indicates that you did not set up the “slots” to accommodate the memory card. Select the Slots icon (see below) and install the card.

Figure 4: The IIe Option Panel



The buttons at the bottom of the panel let you eject disks from the floppy drive(s), get help about the options on the screen, quit the IIe emulator and return to the Macintosh Finder, and restart your IIe. The Continue Button returns control to the Apple IIe program you were running before you called the Options Panel.

Most Option Panel settings are self-explanatory; I will describe those that need some elaboration.

General Interest...

Printer Card: One of the most significant enhancements in version 2.0 of the Apple IIe Card Software is its ability to print from Apple II applications on your Macintosh printer. It accomplishes this feat by printing to a hypothetical "Printer Card" instead of to a serial card as used in earlier versions of the software. The Printer Card then uses the printer driver that you selected with the Chooser.

The Printer Card option lets you control the "printer timeout", which gives your Apple IIe programs more time to finish printing before it accepts another document. Click on the Extend Printer Timeout Box if the printer starts to print another job before completing the work you sent to the printer.

Serial Cards: The Option Panel supports two serial devices (such as modems and plotters) connected to the Printer Port and/or Modem Port on the Macintosh. *Do not use either of these cards to drive a printer despite the use of the printer image on one of the Serial Card icons.*

If you want to use an Apple II telecommunications program to drive a modem, click on the telephone icon and set the communications parameters to match those supported by your modem. Then select the Slots icon and install the Serial Card in slot 2. Finally, return to the Macintosh Finder and re-launch the IIe Startup application.











If you have trouble receiving or sending data at more than 1200 baud, go to the Options Panel, select General Controls, and set the display to "monochrome".

Slots: The Slots icon lets you position your peripheral "cards" into hypothetical "slots". Figure 5 describes each icon that appears on the Slots screen.

The default settings are as follows: Slot 1: Printer Card; Slot 2: Clock Card; Slot 3: Monitor Card (Do not move this card.); Slot 4: Mouse Card; Slot 5: SmartPort; Slot 6: 5.25-inch Drive Controller Card; Slot 7: Expanded Memory Card.

Don't change the default settings unless you use an Apple II telecommunications program or want to connect your Apple II to a fileserver.

Figure 5: Apple IIe Cards

	Printer Card	Controls the printer. Use instead of the serial ports.
	Clock Card	Simulates a ProDOS-compatible clock.
	Monitor Card	Controls the display. Do not move this card.
	Mouse Card	Controls the mouse.
	SmartPort Card	Controls the internal 3.5-inch drive and ProDOS partitions.
	5.25" Drive Card	Controls any 5.25" drives you attach to your Macintosh LC.
	Memory Card	Simulates an Apple Memory Expansion Card.
	Serial Card, printer	Controls a modem or other serial device, but <i>not</i> a printer.
	Serial Card, modem	Controls a modem or other serial device, but <i>not</i> a printer.
	AppleShare Card	Lets you connect to a fileserver. Install only in slot 7.

If you use a modem, replace the Clock Card by dragging the Modem Serial Card into slot 2. If you use a fileserver, drag the Memory Card into slot 2 (if you do not use a modem) or slot 4 (if you do use a modem) and drag the AppleShare Card (see Figure 5) into slot 7.

The Slots icon also lets you set the startup slot (the slot the Apple IIe looks for ProDOS). The default setting is "scan", which is appropriate for most applications.

General Interest...

SmartPort: The Option Panel supports a SmartPort; a card that controls your 3.5-inch disk(s) and ProDOS volume(s) on your hard drive. The SmartPort "maps" the first two devices into the slot that contains the card (the default is slot 5). It maps the other devices into slot 2. Most users should accept the default settings.

Return to the Macintosh Finder

You have now configured your Apple IIe Card Software and should be familiar with the configuration process. Click on "Quit IIe" twice to return to the Macintosh Finder.

Next month, I will describe how to configure and run copies of TimeOut-enhanced AppleWorks on your Macintosh.

[Nanette Luoma is the Page Layout Specialist for the National AppleWorks Users Group.]

[The Apple IIe Card Software costs \$12 plus \$2 s/h from NAUG.]

LockOut 2.0

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Tired of resetting Control Panels after students leave class?? READ THIS!

LockOut has been upgraded to include automatic installation on file servers, hard disks, GS/OS floppies, and ProDOS-8 floppies. It also features a printed, informative, and fun to read 40 paged manual. Hundreds of teachers in the US and Canada are using LockOut to save themselves hours of drudgery every week, by preventing students from changing the Control Panel settings on their IIGS computers. Priced at \$49.95 for manual and two 800k floppies, including site-license for all computers in a single building, postage included. Current owners may upgrade for \$24.95. Money back guarantee.

SuperStuff
3382 Sandra Drive
Kalamazoo, Michigan 49004

Special Offers

Special Offers for NAUG Members

Office Productivity Software

NAUG members can now get special prices on Disk Tools, O.P. Software's collection of three new TimeOut modules that let you back up and restore a hard disk, make incremental backups of files, and shrink and unshrink files from within AppleWorks.

Disk Tools lists for \$49.95. However, until June 1, 1992, NAUG members can buy Disk Tools directly from the publisher for \$35 plus \$2.50 s/h. NAUG members will also receive a copy of About Time, the company's TimeOut module that performs date calculations within AppleWorks. Include your check, MasterCard, or Visa number and expiration data and your NAUG membership number with your order. O.P. Software maintains a "satisfaction guaranteed or your money back" policy for NAUG members. *[Office Productivity Software, Box 1042, Mahomet, Illinois 61853.]*

The AppleWorks Educator

The AppleWorks Teacher Resource Disk is a double-sided 5.25-inch disk filled with files and templates for teachers and students using AppleWorks. The disk contains teacher management templates, student learning aids, and a description of the features of AppleWorks 3.0. AppleWorks instructors will appreciate the workshop outlines, the guide to conducting AppleWorks workshops, a data base of AppleWorks instructional materials, and several sample examinations.

The AppleWorks Teacher Resource Disk usually sells for \$14.45. However, through May 30, 1992, NAUG members can buy the disk for \$12 post-paid. Payment by check of U.S. funds drawn on a U.S. bank must accompany your order. Add \$3 for foreign delivery.

The company also publishes The AppleWorks Educator, a 20-page bi-monthly newsletter for teachers using AppleWorks. A one-year (six issues) subscription to The AppleWorks Educator costs \$25, foreign postage additional. *[The AppleWorks Educator, Box 72-NG, Leetsdale, Pennsylvania 15056.]*

News for NAUG Members

NAUG

The Electronic Forum, NAUG's electronic bulletin board service, now supports 9600 baud modems and v32, v32.bis, v42, v42.bis, and MNP-5 protocols. (The combination of v32.bis protocol operating on a 9600 baud modem gives throughput of 14.4K bits per second. That is six times faster than the throughput on a standard 2400 baud modem.) Call the board at (615) 359-8140 if your modem supports one or more of these protocols. All other users should continue to contact the board at (615) 359-8238.

Alliance International

The Alliance International, an organization of Apple II users and developers, wants the U.S. Postal Service to honor the Apple II computer as the computer that started the personal computer revolution. Their objective is to get the Apple II on a U. S. postage stamp. If you support this effort, please send a note to: Citizens Advisory Committee, c/o General Manager, Stamps Division, United States Postal Service, Washington, DC 20265-6351.

CompuServe

CompuServe recently announced the availability of a new flat-rate billing service that gives users discounted access to many of the company's most popular services. CompuServe's new "Basic Service" costs \$7.95 per month and allows unlimited use of many popular CompuServe services including Associated Press Online, Accuweather, Grolier's Academic America Encyclopedia, Peterson's College Database, The Electronic Mall, Consumer Reports, Current Stock Quotes, and EAASY SABRE. The Basic Service fee applies at all modem speeds, including 9600 baud where available. For more information, issue the command GO NEWBASIC at any "!" prompt after you log onto CompuServe.

[CompuServe Information Services, 5000 Arlington Center Boulevard, Box 20212, Columbus, Ohio 43220; (800) 848-8990; (614) 457-8600.]

MECC

The Minnesota Educational Computer Corporation (MECC), the nation's largest developer of educational software, pioneered the use of district-wide software site licenses. MECC recently announced the availability of less expensive building-level licenses and the direct distribution of MECC software to individual school buildings. Schools that use MECC software should contact the company for additional information.

[MECC, 6160 Summit Drive North, Minneapolis, Minnesota 55430; (800) 685-6322 x. 549. Canada: (800) 663-7731.]

Resource Central

Resource Central (the publishers of *A2 Central* and *TimeOut Central*) recently assumed responsibility for distributing all products formerly distributed by the Apple Programmer's and Developer's Association (APDA). This includes all Apple II hardware and utilities reference manuals, assorted programming toolkits, references for the many programming languages available for the Apple II, the MPW Cross-Development Suite, and all other developer and reference tools for the Apple II family of computers.

Resource Central also reports that they now offer the largest selection of Apple II books in print. NAUG members can contact the company for a free catalog.

[Resource Central, Box 11250, Overland Park, KS 66207; (913) 469-6502; Fax: (913) 469-6507.]



MOVING?

Remember to notify NAUG if you change your address. Do not rely on the post office to forward your mail; you may miss some issues. Send address changes to NAUG; Box 87453; Canton, MI 48187.

Help with AppleWorks Utilities

by Nanette Luoma

How to Use this List

To the left of each volunteer's name are numbers indicating the utilities the consultant supports. Volunteers are listed alphabetically by state.

1 = ProDOS	4 = Disk/File Recovery
2 = File Conversion	5 = ProSel
3 = Copy II+	6 = EasyDrive

		City	Home	Work
Arizona				
3	Clay Evitts	Tucson	602-885-9789	602-296-5491

California				
1	Dan Balsley	San Ramon	415-829-5085	
3	Brian Blue	Danville	415-838-0997	415-954-6002
1-5	James Davis	Hayward	415-489-7024	
3	Don Farrar	Pleasant Hill	415-932-5509	
1-5	Terry Higgins	Newark	415-745-7884	415-593-2500
1	Alan E. Kahn	San Anselmo	415-457-9827	
3,5	Will Nelken	San Rafael	415-459-0845	415-456-1795
5	Jesus Orosco	Milpitas	408-270-1011	408-945-4344

Colorado				
3	Geoff Hollingsworth	Morrison	303-697-9277	
2,3	John Lefebvre	Thornton	303-451-5558	303-457-2852
1,3	John Loren	Littleton	303-978-0603	
1-5	Stephen Reiss	Aspen	303-923-6172	303-923-6172

Connecticut				
5	Martin Knight	Middletown	203-346-9698	203-347-8594
1,3,5	Newton Shaffer	Gales Ferry	203-464-9716	

Delaware				
3	W. Henry Linton, Jr.	Wilmington	302-478-3740	

Florida				
1,3,4	H. Clay Bailey III	Jacksonville	904-744-2499	904-725-3477
3	Robert J. Booz	Port Richey	813-868-1802	
3	Ronald Stankiewicz	Patrick AFB		407-494-2227
1-6	Jeff Strichard	Ft. Lauderdale	305-587-9590	
1-5	Mike Ungerman	Oviedo	407-366-0060	407-366-0156

Illinois				
1-3	William Davis	Hinsdale	708-655-9142	708-887-1730
1-3	George Duffey	Bloomington	708-894-0849	708-451-3106
1,3-5	Douglas Gum	Mohomet	217-586-2904	
1	Dr. Larry Thaete	Waukegan	708-662-2328	708-473-2200

Indiana				
3	Jack Countryman	Greensburg	812-663-4998	
3	Kevin Gold	Indianapolis	317-290-8948	317-543-7098
3	Laura J. Kelley	Gwynneville	317-763-7290	

Iowa				
1,3	Keith King	Ft. Madison	319-372-9521	
1,3,5	Stephen May	Audubon	712-563-2925	712-563-4217

		City	Home	Work
Kentucky				
2	Donald L. Corson	Louisville	812-256-3517	502-473-3083
1,5	Dan Crutcher	Louisville	502-895-1476	502-895-2720

Louisiana				
1-3	Charles Fryling, Jr	Baton Rouge	504-766-3120	504-388-1473

Maryland				
3	Raymond Greenberg	Darnestown	301-330-4912	301-353-4959
3	Ben Maser	Owings Mills	301-252-7884	301-887-0717
5	Anthony R. Mattern	North East	410-658-4799	410-658-5535
1,2,4,6	Leon Raesly	College Park		301-220-3113
1-5	Ray L. Settle	Arnold	301-647-9192	301-887-0106
1,3	Woodrow Webster	Fallston	301-879-7034	301-887-0171

Massachusetts				
1,3	Donald McCabe	Westport	401-294-6256	508-636-2611

Michigan				
3	Jim Anker	Auburn Hills	313-391-0033	313-544-5344
1-3,6	Michael McMinn	Swartz Creek	313-655-4442	313-232-6541
1-5	Pete Ross	Wayne	313-728-8269	
3	Deborah Williams	Grosse Ile	313-671-0267	313-675-1550

Minnesota				
1-5	James Hirsch	Coon Rapids	612-421-8393	612-422-5572
3	David Ernest Johnson	Minneapolis	612-824-2728	612-824-2728
3	Dick Kenfield	Hopkins	612-938-4382	
3	Peter Zambino	St. Paul	612-690-0536	612-489-1459

Missouri				
1-4	Bob Suits	Columbia	314-445-6082	

Nebraska				
5	Jim Corbin	Bellevue	402-291-7285	402-331-7312
1-4	Kevin Garvin	Dixon	402-584-2271	402-584-2271
1-4	Dr. John W. Kelley	Omaha	402-397-3485	
1-5	Larry B. McEwen	Hastings	402-463-2267	402-461-7550

Nevada				
1,3	Keith Johnson	Sparks	702-626-2543	702-784-4812

New Hampshire				
3	Phil Kirkpatrick	Keene		603-352-0640

New Jersey				
3	Mitch Bernstein	Medford	609-654-1356	
2,3	Pete Crosta	Nutley	201-667-6369	201-677-4050
1-5	Jay Hubschman	Fairfield	201-575-1968	201-624-8046
3	Link Keur	Augusta	201-875-2568	201-992-7000
1-5	David Scott	Wall	201-531-0600	201-681-0600

New Mexico				
3,5	Willis George, Jr.	Albuquerque	505-897-4886	505-883-9743
3	David Selwyn	Las Cruces		505-522-7622
1,2,5	Gary Young	Corrales	505-897-1770	505-897-1770

New York				
3	Bob Beer	Coram	516-928-6870	
1-3	Linda Doscher	West Nyack	914-358-7064	
3	David W. Gagnon	Gowanda	716-532-4870	
1,3	Carlos M. Madan	Morrisville	518-562-0779	518-359-3322
3,5	Larry Merow	Sayville	516-567-0603	516-422-0315
1-4	James L. Nicoll	Pittsford	716-381-9480	716-546-6732
1-4	Terry Williamson	Orchard Park	716-662-5104	716-873-9750

AppleWorks Utilities ...

		City	Home	Work
North Carolina				
5	Marc Apfelstadt	Greensboro	919-282-1494	919-334-5970

Ohio				
1-5	Jason Chao	Cleveland Hts.	216-321-5451	216-844-3791
3,5	Don E. Fisher	Dayton	513-890-0428	513-461-2444
1,3,4	Jason Fogt	Lakeview	513-843-5779	
1,3	Carman Greco	St. Clairsville	614-695-5026	

Oregon				
1-5	Jim Emig	Portland	503-771-1916	503-280-5666
1,3,6	M.W. Fox	Corvallis	503-754-7623	503-737-3628
3,6	Norma Gradwohl	Brownsville	503-466-5668	503-466-5668
1	Dave Lomax	Lake Oswego	503-636-7289	
5	Richard Millus	Medford	503-772-9787	

Pennsylvania				
1,3,4	Claude Davis, Jr.	Stewartstown	717-993-6874	717-845-3571
1-4	Martin Friedman	Broomall	215-353-2753	
5	William D. Hall	Philadelphia	215-824-1160	215-441-0800
1	Rivka Rosenkrantz	Philadelphia	215-464-4725	215-493-1800
3	Charles R. Schultes Jr.	Lehigh	215-377-5169	215-377-6180
1-4,6	Bruce Shanker	Warminster	215-674-0118	
5	Hal Shapiro	Eagleville	215-630-8936	215-922-0500

Tennessee				
1,3	Jerry Bruce	Bristol	615-652-7473	703-676-2999
1-3	Bob Evridge	Knoxville	615-693-8817	615-693-9242
3	Joel Goldman	Nashville	615-352-3617	

Texas				
3,5	Larry Jones	El Paso	915-533-3302	915-565-3016
1,3-5	Joseph Kline	Lubbock	806-796-0829	
1-5	Ramon Merlin	San Antonio	512-496-5331	
1-5	Bud Simrin	Fort Worth	817-246-0859	
3,5,6	Rev. Jerry Don Venable	Liberty	409-336-3178	409-336-6958

Vermont				
1,5	Douglas C. Corey	Middlebury	802-388-6209	802-388-4021
3	Linda Metzke	Concord	802-748-3298	802-626-9371

Virginia				
1-4	Peter Pfeiffer	Herndon	703-437-1985	703-834-3618
1-3	Wayne Sheffield	Virginia Beach	804-340-6799	

Wisconsin				
1,3,5	Peter Lee	Milwaukee		414-229-6660
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